IN THE CLAIMS

Please amend claim 4 as follows:

1. (Previously presented) A network address translating ("NAT") gateway for detecting datagrams having process-specific nontranslatable port addresses and passing said datagrams through the NAT gateway without translating their port addresses, said NAT gateway connecting a LAN to an external network, said LAN using local IP addresses said NAT gateway having a local IP address that can be referenced by devices on said LAN and having an external IP address that can be referenced by devices on said external network, said NAT gateway comprising:

said NAT gateway having a plurality of internal tables associating combinations of local IP addresses of local devices on said LAN, external IP addresses of external devices on said external network, security parameter index ("SPI") - In values, SPI - Out values, source port addresses, destination port addresses, process-specific port addresses;

said NAT gateway maintaining a list of selected process-specific nontranslatable port addresses to which datagrams can be passed without translating their port addresses;

means for performing normal address translation upon datagrams passing from said LAN to said external network and datagrams passing from said external network to said LAN;

means for delivering a datagram from a local device on said LAN to an external device on said external network by receiving a datagram from a local device on said LAN intended for delivery to an external device on said external network, and determining whether the destination port address for said datagram is included in said list of selected process-specific nontranslatable port addresses and, if said destination port address is not

included in said list of selected process-specific nontranslatable port addresses, performing normal address translation upon said datagram and passing said datagram to said external network for routing and delivery to said external device;

and if said destination port address is included in said list of selected process-specific nontranslatable port addresses, determining whether said destination port address is bound to a local IP address, and if said destination port address is bound to a local IP address, performing normal address translation upon said datagram and passing said datagram to said external network;

and if said destination port address is not bound to a local IP address, passing said datagram through said NAT gateway without translating said port addresses of said datagram, modifying said source IP address of said datagram to be said external IP address of said NAT gateway, binding said destination port address to the local IP address of said local device and creating an association between said destination port address and the external IP address of said external device, and passing said datagram to said external network for routing and delivery to said external device.

2. (Previously presented) The NAT gateway of claim 1, wherein the means for delivering a datagram from a local device on said LAN to an external device further comprises a means for determining whether said datagram is encrypted and, if said datagram is encrypted, determining whether the SPI of said datagram is recorded in the SPI - Out field in said internal table and, if said SPI is recorded in said SPI - Out field, modifying the source IP address of said datagram to be said external IP address of said

NAT gateway and passing said datagram to said external network for routing and delivery to said external device.

3. (Previously presented) The NAT gateway of claim 2, further comprising if said SPI is not recorded in said SPI - Out field of said internal table, means for setting the SPI - In field corresponding to the local IP address of said local device equal to zero and setting said SPI - Out field equal to said SPI, modifying said source IP address of said datagram to be said external IP address of said NAT gateway and passing said datagram to said external network for routing and delivery to said external device.

4. (Currently amended) The NAT gateway of claim 1, wherein the NAT gateway further comprises means for delivering a datagram from said external device to said local device by receiving a datagram from said external device on said external network intended for delivery to said local device on said LAN, means for determining whether said datagram is encrypted and, if said datagram is encrypted, determining whether the datagram's SPI is recorded in said SPI - In field of said internal table and, if said SPI is recorded in said SPI - In field, modifying the destination IP address of said datagram to be said local IP address of said local device and passing said datagram to said LAN for routing and delivery to said local device,

and if said SPI is not recorded in said SPI - In field of said internal table, determining whether said SPI - In field corresponding to said IP address of said external device is equal to zero and, if said SPI - In field is not equal to zero, discarding said datagram, and if said SPI - In field is equal to zero, setting said SPI - In field equal to said

SPI, modifying the destination IP address of said datagram to be said local IP address of said local device and passing said datagram to said LAN for delivery to said local device,

and if said datagram is not encrypted, determining whether the destination port address for said datagram is included in said list of selected process-specific ~~port~~ nontranslatable port addresses and, if said destination port address is not included in said list of selected process-specific nontranslatable port addresses, performing normal address translation upon said datagram and passing said datagram to said LAN for delivery to said local device,

and if said destination port address is included in said list of selected process-specific nontranslatable port addresses, determining whether said destination port address is bound to a local IP address, and if said destination port address is not bound to a local IP address, discarding said datagram, and if said destination port address is bound to a local IP address, determining whether said destination port address is associated with the external IP address of said external device, and if said destination port address is associated with the external IP address of said external device, modifying said destination IP address of said datagram to be the bound local IP address of said local device, unbinding said destination port address from said local IP address, and passing said datagram through to said LAN for delivery to said local device.

5. (Previously presented) The NAT gateway of claim 1, further comprising a timer, wherein, upon receiving a signal that a selected process-specific nontranslatable port address has become bound to an IP address, said timer will commence timing for a predetermined length of time and, upon the expiration of said predetermined length of

time, will send a signal causing said selected process-specific nontranslatable port address to become unbound from said IP address, and, upon receiving a signal indicating that said selected process-specific nontranslatable port address has become unbound from said IP address prior to the expiration of said predetermined length of time, said timer will stop timing and will reset.

6. (Previously presented) The NAT gateway of claim 1 in which said external network is the internet.

7. (Previously presented) The NAT gateway of claim 6 in which said LAN is a virtual private network.

8. (Previously presented) A method of processing IP datagrams from a local device on a LAN using local IP addresses through a network address translating ("NAT") gateway to an external device on an external network by passing datagrams having process-specific port addresses through said NAT gateway without translating said port addresses, comprising the steps of:

maintaining a plurality of tables associating local IP addresses of local devices on said LAN, external IP addresses of external devices on said external network, port addresses of said local devices, port addresses of said external devices, security parameter index ("SPI") - In values, SPI - Out values, and process-specific port addresses, and a list of selected process-specific port addresses to which datagrams can be passed without translating their port addresses,

receiving a datagram from said LAN

determining whether the destination port address for said datagram is included in said list of selected process-specific port addresses and, if said destination port address is not included in said list of selected process-specific port addresses, performing normal address translation upon said datagram and passing said datagram to said external network for routing and delivery to said external device,

and if said destination port address is included in said list of selected process-specific port addresses, determining whether said destination port address is bound to an IP address, and if said destination port is bound to an IP address, performing normal address translation upon said datagram and passing said datagram to said external network,

and if said destination port address is not bound to an IP address, passing said datagram through said NAT gateway without translating the port addresses in said datagram, modifying said source IP address to be said external IP address for said NAT gateway, binding said destination port address to the local IP address of said local device and creating an association between said destination port address and said external IP address of said external device, and passing said datagram to said external network for routing and delivery to said external device.

9. (Previously presented) The method of claim 8, further comprising the steps of:

determining whether said datagram is encrypted and, if said datagram is encrypted, determining whether the SPI in said datagram is recorded in the SPI - Out field of one of said plurality of internal tables and, if said SPI is recorded in said SPI -

Out field of said internal table, modifying the source IP address to be the external IP address of said NAT gateway and passing said datagram to said external network for routing and delivery to said external device, and if said SPI is not recorded in said SPI - Out field of said internal table, setting said SPI - Out field corresponding to the IP address of said external device equal to said SPI and setting the SPI - In field of said internal table to zero, modifying said source IP address to be said external IP address of said NAT gateway, and passing said datagram to said external network for routing and delivery to said external device.

10. (Previously presented) A method of processing IP datagrams from an external device on an external network through a network address translating ("NAT") gateway to a local device on a LAN using local IP addresses, comprising the steps of

maintaining a plurality of tables associating local IP addresses of local devices on said LAN, external IP addresses of external devices on said external network, port addresses of said local devices, port addresses of said external devices, security parameter index ("SPI") - In values, SPI - Out values, and process-specific port addresses, and a list of selected process-specific port addresses,

receiving a datagram from said external network

determining whether said datagram is encrypted and if said datagram is not encrypted, determining whether the destination port address for said datagram is included in said list of selected process-specific port addresses, and if said destination port address is not included in said list of selected process-specific port addresses, performing normal

address translation and passing said datagram to said LAN for routing and delivery to said local device,

and if said destination port address is included in said list of selected process-specific port addresses, determining whether said destination port address is bound to a local IP address, and if said destination port is not bound to a local IP address, discarding said datagram,

and if said destination port address is bound to a local IP address, determining whether said destination port address is associated with the external IP address of said external device, and if said destination port address is associated with said external IP address of said external device, modifying said destination IP address to be the bound local IP address of said local device, unbinding said destination port address from said local IP address, and passing said datagram through said NAT gateway to said LAN for routing and delivery to said local device.

11. (Previously presented) The method of claim 10, wherein the method further comprises the steps, if said datagram is encrypted, of:

determining whether the SPI in said datagram is recorded in the SPI - In field of one of said plurality of internal tables and, if said SPI is recorded in said SPI - In field of said internal table, modifying the destination IP address to be the local IP address of the local device corresponding to said SPI – In field and passing said datagram to said LAN for routing and delivery to said local device,

and if said SPI is not recorded in said SPI - In field of said internal table, determining whether said SPI - In field corresponding to the IP address of said external device is zero, and if said SPI - In field is not zero, discarding said datagram,

and if said SPI - In field is equal to zero, modifying said SPI - In field to be said SPI, modifying said destination IP address to be said local IP address of said local device corresponding to said SPI – In field, and passing said datagram to said LAN for routing and delivery to said local device.

12. (Previously presented) The method of processing IP datagrams as claimed in claim 8, further comprising the steps of starting a timer whenever a selected process-specific port address becomes bound to said local IP address of said local device,

resetting said timer whenever said destination port address has become released,

and sending a signal whenever said timer is active and a predetermined length of time has expired from the time said timer was started.

13. (Canceled)

14. (Previously presented) The method of processing IP datagrams as claimed in claim 11, in which said external network is the internet.

15. (Previously Presented) The method of processing IP datagrams as claimed in claim 11 in which said LAN is a virtual private network.

16. - Missing

17. (Previously presented) The method of processing IP datagrams as claimed in claim 12 in which said LAN is a virtual private network.

18. (Previously presented ) A machine readable storage, having stored thereon a computer program comprising a plurality of code sections executable by a machine for connecting a LAN to an external network via a network address translating ("NAT") gateway, said NAT gateway having a local IP address that can be referenced by devices on said LAN and having an external IP address that can be referenced by devices on said external network, and further comprising a plurality of internal tables associating combinations of local IP addresses of local devices on said LAN, external IP addresses of external devices on said external network, source port addresses, destination port addresses, process-specific port addresses, and a list of selected process-specific port addresses including at least port 500, for causing the machine to pass datagrams through without translating port addresses where the port addresses in such datagrams are nontranslatable, said machine performing the steps of:

processing a datagram from a local device on said LAN by receiving a datagram from a local device on said LAN intended for delivery to an external device on said external network;

determining whether the destination port address for said datagram is included in said list of selected process-specific port addresses and determining whether said destination port address is bound to a local IP address on said LAN;

and if said destination port address is not included in said list of selected process-specific port addresses, performing normal address translation upon said datagram and passing said datagram to said external network for routing and delivery to said external device;

and if said destination port address is included in said list of selected process-specific port addresses, and said destination port address is bound to a local IP address, performing normal address translation upon said datagram and passing said datagram to said external network;

and if said destination port address is not bound to a local IP address on said LAN, modifying said source IP address of said datagram to be said external IP address of said NAT gateway, binding said destination port address to the local IP address of said local device and creating an association between said destination port address and the external IP address of said external device, and passing said datagram to said external network for routing and delivery to said external device without translating said port addresses of said datagram.

19. (Previously presented) The NAT gateway of claim 1 wherein said list of selected process-specific nontranslatable port addresses to which datagrams can be passed without translating their port addresses comprises port 500.

20. (Previously presented) The method of claim 8, in which said list of selected process-specific port addresses to which datagrams can be passed without translating their port addresses comprises port 500.

21. (Previously presented) The method of claim 10, in which said list of selected process-specific port addresses comprises port 500.